



August 13, 2004

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RE: An Electrostatic Shielding, Low Charging Retaining Moisture Barrier Film  
Invention of Brent Beamer  
Application Number: 09/720,932

Dear Sir:

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The present Appeal Brief is being filed in response to the Notification of Non-Compliance with 37 C.F.R. 1.192(c) dated July 29, 2004. The undersigned believes the issues raised in the notification have been addressed and respectfully requests the examiner review the attached Appeal Brief and respond accordingly.

Additionally, please confirm receipt of the above documents by stamping the enclosed self-addressed, postage paid postcard and returning it to me for my file. Thank you in advance.

Respectfully submitted,

Steven R. Quinley  
Registration No. 47,012

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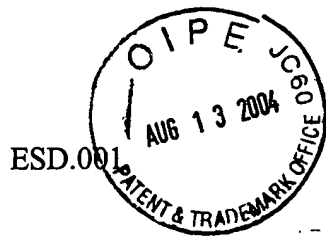
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08-16-04

AF/1773

JFW

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of : Brent Beamer  
For: : An Electrostatic Shielding, Low Charging  
Retaining Moisture Barrier Film  
Serial No. : 09/720,932  
Filed : January 2, 2001  
Group : 1773  
Examiner : Kruer, Kevin R.

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Sanford, North Carolina  
August 13, 2004

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

APPELLANT'S BRIEF

Sir:

1. The Real Party In Interest

The real party in interest is the assignee, Static Control Components, Inc.

2. Related Appeals and Interferences

None.

3. Status of the Claims

This is an appeal from the January 2, 2004 final rejection of claims 1-3, 5-12, and 14-30,

all of the pending claims. Claims 1-3, 5, 6, 8-10, 12, 14-18 and 22-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White U.S. Patent No. 4,699,830 (White) in view of Havens U.S. Patent No. 5,175,033 (Havens), as evidenced by Wang et al. U.S. Patent No. 4,104,516 (Wang) and Golike et al. U.S. Patent No. 5,091,229 (Golike). Claims 7 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Akao et al. U.S. Patent No. 4,906,517 (Akao). Claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Rayford et al. U.S. Patent No. 4,738,882 (Rayford). Claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens and Rayford, as evidenced by Wang, and further in view of Mott U.S. Patent No. 4,756,414 (Mott). Claims 4 and 13 were previously canceled.

4. Status of Amendments

The claims stand as last amended on October 6, 2003.

5. Summary of the Invention

The present invention relates generally to improvements in packaging materials, and more particularly to a film material for use in packaging electrostatically sensitive components and corrosion sensitive components.

In one aspect, a film is provided having excellent electrostatic and moisture barrier properties while not retaining charge on the surface of the film. Page 7, lines 3 and 4. As shown in Fig. 4, in one embodiment of the present invention, a heat sealable static dissipative polymer 1 is utilized as the base layer for the film material. Page 8, lines 2 and 3. This heat sealable static dissipative polymer 1 will become the interior of any packaging material made from the film. Page 8, lines 3-5. The heat sealable static dissipative polymer 1 advantageously allows charge to

bleed off of any component placed inside the packaging material, and is resistant to triboelectrification which might occur when the component is placed inside the package. Page 7, lines 7-9. The heat sealable static dissipative polymer 1 may be attached to a nonmetallized surface 6 of a first moisture barrier 2 by a first tie layer 23. Page 8, lines 14-21. A metallized surface 5 of the first moisture barrier 2 is attached to a nonmetallized surface 7 of a second moisture barrier 3 by a second tie layer 24. Page 9, lines 8 and 9. Alternatively, as shown in Fig. 1, the metallized surface 5 may be oriented toward the heat sealable static dissipative polymer 1. Page 8, lines 19-21. A low charge retaining coating 4 is attached to a metallized surface 8 of the second moisture barrier 3. Page 9, lines 18 and 19. The metallized surfaces serve as moisture barriers, and also act as faraday cages to electrically isolate material placed in the interior of a package from external influences. Page 7, lines 14-16. The low charge-retaining coating 4 provides protection from nicks and scratches, and also allows any charge which may build up on the film to bleed away into the surrounding environment, thus preventing any electrostatic damage to components from charge retained on the surface of a package formed from the film. Page 10, lines 3-8.

By way of example, claim 1 of the present invention reads as follows:

1. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first moisture barrier, said first moisture barrier having a nonmetallized surface, wherein the nonmetallized surface is attached to the heat sealable static dissipative polymer by a first tie layer;
  - c) a second moisture barrier attached to the first moisture barrier, said second

moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer; and

- d) a low charge retaining coating attached to the metallized surface of the second moisture barrier.

#### 6. The Issues For Review

The issues for review are whether claims 1-3, 5, 6, 8-10, 12, 14-18 and 22-30 were properly rejected under 35 U.S.C. § 103(a) over White in view of Havens, as evidenced by Wang and Golike; whether claims 7 and 11 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Akao; whether claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Rayford; and whether claims 20 and 21 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens and Rayford, as evidenced by Wang, and further in view of Mott.

#### 7. Grouping of Claims

The rejected claims do not stand or fall together. The claims should initially be considered in Groups I-III based upon groupings of the independent claims: namely, Group I, claims 1, 2-11, 14-22, and 27-30; Group II, claim 12; and Group III, claims 23-26. The independent claims 1, 2, 12, 14 and 23 each address aspects of “a low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion.”

Additionally, the dependent claims address a number of combinations and limitations not found in the independent claims. The following additional grouping of subject matter is noted:

the low charge retaining layer comprising “carbon loaded polymer” and “carbon loaded acrylic” (claims 7 and 11, respectively); the moisture penetration rate of the film material being “less than .02 grams per 100 square inches per 24 hours” (claims 26-29); particular layer thickness (claims 5, 18 and 25); the metallized surface of the second moisture barrier being attached to the nonmetallized surface of the second moisture barrier by a third tie layer (claim 30); and the dielectric polymer being attached to the metal foil by a third tie layer (claim 15).

8. Argument

The final rejection under 35 U.S.C. § 103 did not follow M.P.E.P. § 706.02(j) which states:

After indicating that the rejection is under 35 U.S.C. 103, the Examiner should set forth...the difference or differences in the claim over the applied reference,...the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and...an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

As will be illustrated below, the claims of the present invention are not obvious in view of the references relied upon by the Examiner.

A. The Section 103 Rejections

The art rejections are not supported by the relied upon art. 35 U.S.C. § 103 which governs obviousness indicates that “differences between the subject matter sought to be patented and the prior art” are to be assessed based upon “the subject matter as a whole”. Analyzing the entirety of each claim, the rejections under 35 U.S.C. § 103 are not supported by the relied upon art as addressed further below. Only after an analysis of the individual references has been made can it then be considered whether it is fair to combine teachings. However, as addressed further below, fairness requires an analysis of failure of others, the lack of recognition of the problem,

and must avoid the improper hindsight reconstruction of the present invention. Such an analysis should consider whether the modifications are actually suggested by the references rather than assuming they are obvious. The 35 U.S.C § 103 rejections made here pick and choose elements from a variety of separate references, none of which presents any motivation for making the suggested combination. This approach constitutes impermissible hindsight and must be avoided. As required by 35 U.S.C. § 103, claims must be considered as a whole. When so considered, the present claims are not obvious.

Turning to the two references relied upon in rejecting all of the independent claims, White discloses a laminated sheet material for packaging electronic components. Referring to Figure 2 of White, White discloses a laminated sheet material for packaging electronic components including an antistatic layer 20 and a first conductive metal layer 22 adhered to the antistatic layer 20 by an adhesive layer 24. A carrier or substrate layer 26 is disposed on the first metal layer 22 and a second metal layer 28 is disposed on the substrate layer 26. A topcoat layer 30 is disposed on the second metal layer 28 for protection of the second metal layer 28. The Examiner indicates that White does not teach a nonmetallized surface between the antistatic layer 20 and the first conductive metal layer 22, and then relies upon Havens to cure this admitted failing of White. Havens discloses a flexible sheet material for packaging electrostatically sensitive items. In one embodiment, as described at column 9, line 55, Havens discloses a laminate of “aluminum/polyester/adhesive/antistatic film.”

Regarding claim 1, this claim recites “a second moisture barrier attached to the first moisture barrier, said second moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer....” The Examiner relies upon the carrier or substrate layer 26 and



the metal layer 22 of White as teaching the nonmetallized surface of the second moisture barrier and the metallized surface of the first moisture barrier, respectively, of the present invention. The metal layer 22 of White is deposited directly on this carrier film layer 26. See column 4, lines 25-29, where White states that “[t]he first conductive metal layer 22...can be deposited on the substrate [26] by any available means such as vacuum or sputter metallization.” (emphasis added). In other words, White only teaches that the metal layer 22 is deposited on the substrate 26 via techniques which deposit the metal layer 22 directly on the substrate 26.

In contrast to the relied upon art, the present invention, as claimed in claim 1, requires that “the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer....” White does not teach or render obvious such a tie layer. To the contrary, White teaches away from the present invention by requiring that the metal layer 22 be deposited directly on the substrate 26. See also column 5, lines 15-23, of White, where White indicates that a second metal layer 28 is “adhered, bonded, or deposited” on the other side of the substrate 26 “using any conventional technique such as vacuum or sputter metallization.” Additionally, White teaches that his laminated material be thin to allow transmission of light through the material. Providing an additional layer to White’s laminate, such as the claimed second tie layer, would diminish, if not eliminate, light transmission, and thus is clearly at odds with the teachings of White. A second tie layer as claimed by claim 1 is simply not taught or rendered obvious by the relied upon art.

Similarly, claim 2 requires a “nonmetallized surface of said second polymeric moisture barrier being attached to said metallized surface of said first polymeric moisture barrier by a second tie layer....” Claim 14 requires “a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to the metal foil by a second tie layer...” The use of

a second tie layer as claimed by claims 2 and 14 is not taught or rendered obvious by the relied upon art.

Turning to claim 12, this claim recites “a second moisture barrier with a metallized surface and a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to a nonmetallized surface of the first moisture barrier by a second tie layer...”

(emphasis added) This claim clearly recites that the nonmetallized surfaces of each of the moisture barriers are attached via a second tie layer. Such a structure is not taught or rendered obvious by the relied upon art. As described above, White discloses a laminated sheet material including an antistatic layer 20, a first conductive metal layer 22 adhered to the antistatic layer 20 by an adhesive layer 24, and a carrier or substrate layer 26 is disposed on the first metal layer 22 and a second metal layer 28 is disposed on the substrate layer 26. As described at column 9, line 55, Havens discloses a laminate of “aluminum/polyester/adhesive/antistatic film.” Clearly, the relied upon art does not teach or render obvious first and second moisture barriers each having a nonmetallized surface, with the nonmetallized surfaces attached via a second tie layer.

Additionally, as discussed above, the use of a second tie layer as claimed is not taught or rendered obvious by the relied upon art.

Claim 23 requires “a second tie layer attached to the polymeric moisture barrier; a polymeric layer attached to the second tie layer; a third tie layer attached to the second polymeric layer; a metal foil attached to the third tie layer...” The relied upon art does not disclose such a claimed third tie layer. The Examiner appears to ignore these specifically claimed limitations and simply rationalizes that “the adhesive [of White] is understood to read on...the claimed ‘third tie layer’ of claim 23”. Applicant respectfully disagrees. As discussed above, the relied upon art does not teach or suggest a second tie layer, much less a third tie layer. Additionally, the

relied upon art does not teach a metal foil attached to the third tie layer, and a polymeric moisture barrier sandwiched between the second and third tie layers, as presently claimed.

Clearly, the relied upon art does not teach and does not render obvious the structures as presently claimed. Thus, independent claims 1, 2, 12, 14 and 23 are allowable over the relied upon art.

Claim 27 depends directly from claim 1, incorporating all of the limitations thereof and adding further limitations thereto. Claims 3-11, 28 and 30 depend directly or indirectly from claim 2, incorporating all of the limitations thereof and adding further limitations thereto. Claims 15-22 and 29 depend directly or indirectly from claim 14, incorporating all of the limitations thereof and adding further limitations thereto. Claims 24-26 depend directly or indirectly from claim 23, incorporating all of the limitations thereof and adding further limitations thereto. These dependent claims are allowable based upon their dependence on allowable independent claims. In addition, the dependent claims address a number of combinations of limitations not found in the applied references.

Claims 7 and 11 recite that the low charge retaining layer is “carbon loaded polymer” and “carbon loaded acrylic,” respectively. After indicating that White does not teach such limitation, the Examiner relied upon Akao to cure this admitted failing of White. Akao discloses packaging material for photosensitive materials. At column 5, lines 21-24, Akao states that:

The light-shielding ethylene copolymer resin film layer contains a light-shielding material. The light-shielding material includes every material capable of shielding visible light and ultraviolet light.

Both White and Havens desire that their packaging material be light transmissive and not light-shielding as required by Akao. See White column 5, lines 50-68 and Havens column 4, lines 25-29. Applicant respectfully submits that Akao teaches away from White and Havens, and thus

should not be combined with these references. Accordingly, Applicant believes claims 7 and 11 are in order for allowance.

Regarding claims 26-29, these claims each recite that the moisture penetration rate of the film material “is less than .02 grams per 100 square inches per 24 hours.” The Examiner rejects these claims by stating that:

White teaches that the thickness of the conductive metal layers should be varied...[and] the thicker...the deposited layer, the better the moisture barrier properties. Thus, by varying the thickness in order to obtain the desired surface resistivity...one of ordinary skill in the art would necessarily obtain the claimed moisture barrier properties.

Applicant respectfully disagrees with this reasoning. As White teaches that the various layers should be thin enough to allow light transmission, any suggestion to increase the thickness of the layers to provide moisture protection is completely contrary to the disclosure of White. Thus, Applicant submits that the relied upon art does not teach or render obvious claims 26-29.

Regarding claims 5, 18 and 25, while admitting that White does not teach the presently claimed layer thickness, the Examiner rejected claims 5, 18 and 25 by stating that:

White does teach that the thickness of the metal will vary depending upon desired surface resistivity...[and] it would have been obvious to one of ordinary skill in the art to vary the thickness of the metal layer taught in White in order to optimize the film’s transparency and surface resistivity.

Applicant respectfully disagrees. This lack of teaching by White is indicative of its failing as a reference, and not the obviousness of these claims, and thus submits that claims 5, 18 and 25 are in order for allowance.

See also claim 30 which recites that the metallized surface of the second moisture barrier is attached to the nonmetallized surface of the second moisture barrier by a third tie layer, and claim 15 which recites that the dielectric polymer is attached to the metal foil by a third tie layer.

Applicant respectfully submits that none of the references teach or render obvious a third tie layer as claimed in claims 15 and 30. Thus, these claims are in order for allowance.

To sum up, the relied upon art does not show and does not suggest a low charge retaining film material for packaging that protects items from electrostatic charge and from moisture caused corrosion as presently claimed. Nothing in the cited references indicates a recognition of the problems addressed by the present invention. Further, nothing in the cited references indicates a film material which would solve the problems addressed by the present invention. The claims of the present invention are not taught, are not inherent, and are not obvious in light of the art relied upon.

B.     The Examiner's Findings of Obviousness are  
          Also Contrary to Law of the Federal Circuit

As shown above, the invention claimed is not suggested by the relied upon prior art. The references cited by the Examiner, if anything, teach away from the present invention. It is only in hindsight, after seeing the claimed invention, that the Examiner could combine the references as the Examiner has done. This is improper under the law of the Federal Circuit, which has stated that "[w]hen prior art references require selective combination by the Court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself." Uniroyal, Inc. v. Ludkin Riley Corp., 5 U.S.P.Q. 2d 1434, 1438 (Fed. Cir. 1988), cert. den., 102 L.Ed. 2d 51 (1988); quoting Interconnect Planning Corp. v. Feil, 227 U.S.P.Q. 543, 535 (Fed. Cir. 1985). Furthermore, "[i]t is impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention." Uniroyal Inc. v. Ludkin Riley Corp., 5 U.S.P.Q. 303, 312 (Fed. Cir. 1983), cert. den., 469 U.S. 851 (1984). Similarly, "[t]he mere fact that the prior art could be so modified

would not have made the modification obvious unless the prior art suggested the desirability of the modification." In re Laskowski, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989), quoting In re Gorgon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). No such suggestion is found here.

In addition, the Examiner does not appear to have considered "where the references diverge and teach away from the claimed invention", Akzo N.V. v. International Trade Commission, 1 U.S.P.Q. 2d 1241, 1246 (Fed. Cir. 1986), cert. den., 482 U.S. 909 (1987); and W.L. Gore Associates, Inc., 220 U.S.P.Q. at 311; nor has the Examiner read the claims as a whole, as required by statute. 35 U.S.C. 103. See also, Smithkline Diagnostics Inc. v. Helena Laboratories Corp., 8 U.S.P.Q. 2d 1468, 1475 (Fed. Cir. 1988); and Interconnect Planning Corp. v. Feil, 227 U.S.P.Q. at 551.

In In re Laskowski, 10 U.S.P.Q. 2d 1397, the Federal Circuit reversed an obviousness rejection of the claims in an application for a bandsaw. The claimed bandsaw used a pulley type wheel loosely fitted with a tire. The primary reference showed a similar bandsaw where the band was tightly fitted. The Federal Circuit stated that the prior art did not provide a suggestion, reason or motivation to make the modification of the reference proposed by the Commissioner. Id. at 1398. The Court added that "there must be some logical reason apparent from the positive, concrete evidence of record which justifies a combination of primary and secondary references." Id. quoting In re Regal, 188 U.S.P.Q. 136, 139 (C.C.P.A. 1975), citing In re Stenniski, 170 U.S.P.Q. 343 (C.C.P.A. 1971).

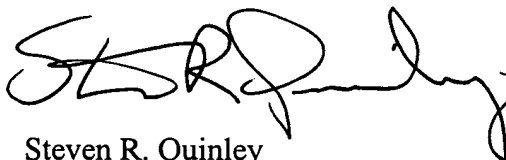
In Uniroyal Inc. v. Ludkin Riley Corp., 5 U.S.P.Q. 2d 1434, the Federal Circuit reversed the District Court's finding that the claims for a patent for an air flow deflecting shield were obvious. Without any suggestion in the art, the District Court improperly chose features from several prior art references to recreate the claimed invention.

The Examiner's rejection suggests that the Examiner did not consider and appreciate the claims as a whole. The claims disclose a unique combination with many features and advantages not shown in the art. It appears that the Examiner has oversimplified the claims and then searched the prior art for the constituent parts. Even with the claims as a guide, however, the Examiner did not recreate the claimed invention.

9. Conclusion

The rejection of claims 1-3, 5-12, and 14-30 should be reversed and the application promptly allowed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'SR Quinley', with a stylized, flowing script.

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APPENDIX  
(Claims Under Appeal)

1. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first moisture barrier, said first moisture barrier having a nonmetallized surface, wherein the nonmetallized surface is attached to the heat sealable static dissipative polymer by a first tie layer;
  - c) a second moisture barrier attached to the first moisture barrier, said second moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer; and
  - d) a low charge retaining coating attached to the metallized surface of the second moisture barrier.
2. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion, said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first polymeric moisture barrier having two surfaces, a metallized surface and a nonmetallized surface, said nonmetallized surface of said first polymeric moisture barrier being attached to said heat sealable static dissipative polymer by a first tie layer;
  - c) a second polymeric moisture barrier having two surfaces, a metallized surface and



- a nonmetallized surface, said nonmetallized surface of said second polymeric moisture barrier being attached to said metallized surface of said first polymeric moisture barrier by a second tie layer; and
- d) a low charge retaining coating attached to said metallized surface of said second polymeric moisture barrier.
3. A material as in claim 2 wherein the first and second tie layers are adhesives.
5. A material as in claim 2 wherein the metal of each of the metallized surfaces of the first and second polymeric moisture barrier is aluminum and the aluminum is at least 170 Angstroms thick.
6. A material as in claim 2 wherein the heat sealable static dissipative polymer has a conductivity of between  $10^{-1}$  and  $10^{-10}$  Siemens.
7. A material as in claim 2 wherein the low charge retaining layer is a carbon loaded polymer with a conductivity of between  $1 \times 10^{-3}$  and  $1 \times 10^{-9}$  Siemens.
8. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited aluminum.
9. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited nickel.
10. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited copper.
11. The material as in claim 2 wherein the low charge-retaining coating is a carbon loaded acrylic.
12. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:

- a) a heat sealable static dissipative polymer;
- b) a first moisture barrier including a metal foil attached to said heat sealable static dissipative polymer, wherein said metal foil is attached to said heat sealable static dissipative polymer by a first tie layer;
- c) a second moisture barrier with a metallized surface and a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to a nonmetallized surface of the first moisture barrier by a second tie layer; and
- d) a low charge retaining coating attached to the metallized surface of the second moisture barrier.

14. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:

- a) a heat sealable static dissipative polymer;
- b) a dielectric polymer attached to the heat sealable static dissipative polymer by a first tie layer;
- c) a metal foil attached to the dielectric polymer to form a first moisture barrier;
- d) a second moisture barrier with a metallized surface and a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to the metal foil by a second tie layer; and
- e) a low charge retaining coating attached to the metallized surface of the second polymeric moisture barrier.

15. A low charge retaining film as in claim 14 wherein the dielectric polymer is attached to the metal foil by a third tie layer.

16. A film material as in claim 15 wherein the first tie layer, the second tie layer, and

the third tie layer are adhesives.

17. A film material as in claim 16 wherein the metal foil is an aluminum foil.
18. A film material as in claim 17 has a thickness of between .0002 inches and .0005 inches.
19. A film material as in claim 15 wherein the dielectric polymer is a biaxly oriented nylon.
20. A film material as in claim 19 wherein the second moisture barrier is a metallized polyethylene.
21. A film material as in claim 20 wherein the metallized surface is aluminum between 170 and 400 Angstroms thick.
22. A film material as in claim 16 wherein the low charge retaining coating and the metallized surface of the second moisture barrier together have a surface conductivity of between  $10^{-3}$  and  $10^{-9}$  Siemens.
23. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:
  - a) heat sealable static dissipative polymer;
  - b) a first tie layer attached to the heat sealable static dissipative polymer;
  - c) a polymeric moisture barrier having two surfaces, a metallized surface and a nonmetallized surface said nonmetallized surface being attached to the first tie layer;
  - d) a second tie layer attached to the polymeric moisture barrier;
  - e) a polymeric layer attached to the second tie layer;
  - f) a third tie layer attached to the second polymeric layer;

- g) a metal foil attached to the third tie layer; and
- h) a low charge retaining coating attached to the metal foil.

24. A film material as in claim 23 wherein the heat sealable static dissipative polymer is an antistat treated polyethylene.

25. A film material as in claim 24 wherein the metal foil is comprised of aluminum foil, and wherein the metallization of the metallized surface of the polymeric moisture barrier is aluminum between 170 and 400 Angstroms thick.

26. A film material as in claim 25 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.

27. A film material as in claim 1 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.

28. A film material as in claim 2 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.

29. A film material as in claim 14 wherein the moisture penetration rate of the material is less than .02 grams per 100 square inches per 24 hours.

30. The material as in claim 2, wherein the metallized surface of the second moisture barrier is attached to the nonmetallized surface of the second moisture barrier by a third tie layer.